

ABSTRACT OF THE DISCLOSURE

An ion attachment mass spectrometry apparatus causing positively charged metal ions to attach to molecules of a gas to be measured in an attachment region to generate attached ions and then performing mass spectrometry on the attached ions by a mass spectrometer, has a metal ion selective disassociation unit for selectively making the metal ions attached to the specific molecules in the attachment region disassociate. By making the metal ions attached to the specific molecules such as H₂O disassociate, a state is formed where the metal ions are attached to only the sample gas to be measured and the reliability of measurement of the gas is improved.